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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/765,144	01/18/2001	Serge Haumont	930.321USW1	7814
32294	7590	05/13/2005	EXAMINER	
SQUIRE, SANDERS & DEMPSEY L.L.P.			NGUYEN, BRIAN D	
14TH FLOOR			ART UNIT	
8000 TOWERS CRESCENT			PAPER NUMBER	
TYSONS CORNER, VA 22182			2661	

DATE MAILED: 05/13/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/765,144

Applicant(s)

HAUMONT ET AL.

Examiner

Brian D. Nguyen

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 29 March 2005.
- 2a) ☒ This action is FINAL. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 49-84 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 49-84 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 18 January 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Claim Objections

1. Claims 51, 58, and 59 are objected to because of the following informalities: Appropriate correction is required.

Claim 51, "data packet" in line 3 should be deleted.

Claim 58, "that" in line 2 should be deleted.

Claim 59, it is suggested to insert --said-- before "first and third station" in line 3

Claim Rejections - 35 USC § 112

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claims 82-84 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 82, line 4, "the node" is unclear which one of "a node" in lines 1 and 2 the applicant is referring to.

Claim 83, line 2, "the node" is unclear which one of "a node" in lines 1 and 2 of claim 82 the applicant is referring to.

Claim 84, line 1, "the node" is unclear which one of "a node" in lines 1 and 2 of claim 82 the applicant is referring to.

Claim Rejections - 35 USC § 102

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4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 49-56, 59-61, 63-65, 67-68, and 73-84 are rejected under 35 U.S.C. 102(b) as being anticipated by Averbuch et al (5,530,693).

Regarding claims 49, 76, and 82, Averbuch discloses a method of transmitting packets of data in a communication network (figure 1) comprising at least first to third stations (105, 109, 106), the method comprising the steps of: providing data packets to only the first station (105) and sending a first number (packets 201-203 for example) of the data packets (packets 201-208) from the first station (105) to a second station (109); subsequently providing data packets to both the first and third station when the second station has at least one predefined parameter with respect to the first and third station (see col. 4, lines 27-31); identifying via the second station which of the first number of packets are correctly received by the second station from the first station (col. 5, lines 2-9); and responsive to a signal from the second station sending a second number (packets 204-208 for example) of data packets from the third station to the second station commencing with a packet identified in the signal as being required after the last correctly received packet received from the first station (see abstract).

Regarding claim 50, Averbuch discloses a common node (103) connected to the first and third stations (see figure 1).

Regarding claims 51-53 Averbuch discloses acknowledging of the data packet and transmitting a second portion from the third station to the second station (see col. 3, lines 23-33).

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Regarding claims 54, 68, Averbuch further discloses data storage means in the first and third station (see RAM 118 and 120 of figure 1) and removing an acknowledged packet from the storage means is inherent and well known.

Regarding claim 55, Averbuch discloses the predefined parameter is defined by the geographic position of the second station with respect to the first and third stations (see figure 1 where handoff is performed when 109 move into cell 112).

Regarding claims 56, 59-61, Averbuch discloses the signal parameter is the quality of signal (see col. 7, lines 52-59).

Regarding claims 63-64, and 83, Averbuch discloses the handoff zone (see figure 1 where the handoff zone is the zone at the borders between cells 111 and 112).

Regarding claim 65, Averbuch discloses when handoff takes place, the second station transmits a signal to the third station to advice the third station of which packet or packets were received from the first station and the third station transmits the data packet identified as being required after the last packet to the second station (see col. 3, lines 23-33 and col. 5, lines 2-9).

Regarding claims 67, Averbuch discloses a unique number (sequence number for example) for each packet (see col. 5, lines 63-65 where blocks 201-208 of data are sequentially transmitted).

Regarding claims 73-75, Averbuch discloses the first and second base stations connected to the common node via a network (see figure 1), implicitly disclose data storage in the common node (the common node must have a memory for storing incoming data; a plurality of cells (BS 105 register with cell 111 and BS 106 register with cell 112);

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Regarding claims 77-81, claims 77-81 are apparatus claims including limitations described in the method claims 49 and 54. Therefore, they are subject to the same rejection.

Regarding claim 84, Averbuch discloses the node is a base station controller (see 103 of figure 1).

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claim 66 is rejected under 35 U.S.C. 103(a) as being unpatentable over Averbuch et al (5,530,693) in view of Rhee (6,104,757).

Regarding claim 66, Averbuch does not specifically disclose if the second station does not correctly receive a data packet, the second station requests retransmission of the data packet. However, this feature is well known in the art. Rhee discloses sending a retransmission request to the sender (see col. 9, lines 55-67). Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to request the retransmission as taught by Rhee in the system of Averbuch in order to guarantee the quality of the communication.

8. Claims 69-72 are rejected under 35 U.S.C. 103(a) as being unpatentable over Averbuch et al (5,530,693) in view of Abu-Amara et al (6,173,183).

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Regarding claims 69-72, Averbuch discloses acknowledging receipt of a data packet at the third station (see ACK blocks 204-205 in figure 2) and the first station (BS 105) is in communication with a first node (BSC 103). Averbuch does not specifically disclose the third station is in communication with a second node. However, a mobile system that comprises a plurality of BSCs connected to a plurality of BSs is well known and is a standard in the art. Abu-Amara discloses this configuration (see figure 2). Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to a mobile system configured as taught by Abu-Amara in the system of Averbuch extend the coverage of the mobile system.

9. Claims 57 and 58 are rejected under 35 U.S.C. 103(a) as being unpatentable over Averbuch et al (5,530,693) in view of Yuen (5,864,578).

Regarding claims 57-58, Averbuch does not specifically disclose the signal parameter is the power level of signals. However, this feature is well known in the art. Yuen discloses this feature (see col. 20, line 47-col. 21, line 7). Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to use the power level for determining a handoff as taught by Yuen in the system of Averbuch in order to meet specific needs.

10. Claims 62 are rejected under 35 U.S.C. 103(a) as being unpatentable over Averbuch et al (5,530,693) in view of Corbett (6,438,116).

Regarding claim 62, Averbuch does not specifically disclose the parameter is averaged over time before it is determined if the criteria is satisfied. However, this feature is well known in the art. Yuen discloses this feature (see col. 4, lines 39-56). Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to use the

averaging technique as taught by Corbett in the system of Averbuch in order to meet specific needs.

Response to Arguments

11. Applicant's arguments filed 3/29/05 have been fully considered but they are not persuasive.

The applicant argued that *Averbuch fails to teach or suggest, at least, "providing data packets to only the first station and sending a first number of the data packets from the first station to a second station," as recited in independent claim 49. Instead, Averbuch specifically provides that at least two base sites, a serving base site 105 and a target base site 106, receive the same data packet 117, 119 to be delivered to a communication unit 109, by dividing the data packet into identical data blocks 201-208. See column 5, lines 52-57. Thus, the data packets are not provided to only the serving base site 105 or to only the target base site 106, but the data packets must be provided to both, the serving base site 105 and the target base site 106.* This argument is not persuasive because Averbuch provides the same data packets to both first and third base stations when, for example, the power levels received from the first and second base stations are close to each other. In other words, the same data packets are provided to both first and third base stations when the mobile station is at the border between cells served by the first and third base station. When the mobile station is much closer to the first station than the third station, then only the first station receives the data packet and when the mobile station move into a cell served by the third station after the handoff, only the third station will receive the data packet (see, for example, col. 1, lines 55-56 where Averbuch teaches that the central controller

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provides the data packets ... to the base site serving the communication unit). The applicant further argued that *Averbuch fails to teach or suggest, at least, "subsequently providing the data packets to both said first and third station when the second station has at least one predefined parameter with respect to said first and third station," as recited in independent claim 49.*

Rather than providing each entire data packet or each data packet as a whole to both the serving base site 105 and the target base site 106 or to both the serving base site 105 and the communication unit 109, Averbuch fragments the data packets and each fragment is then transmitted to the communication unit 109. Thus, Averbuch fails to teach or suggest all the features recited in independent claim 49. The examiner disagrees because Averbuch does teach providing the data packets to both said first and third station where the predefined parameter is BER (see col. 7, line 53). The data packet can be any size including fixed length and variable length. Averbuch does teach, for example, data packets 201-201 (see abstract and figure 2). The applicant further argued that *dependent claim 52 recites the additional feature of "subsequent to said step of sending a second number of data packets providing data packets to only the third station." Averbuch fail to teach or suggest that a second number of data packets are provided only to the target base site 106 or only to the target base site 107.* The examiner disagrees because after the handoff is finished, the target station becomes the serving station and only the third station (serving station) will receive data packets. The respond for claim 49 is applicable to claims 77 and 82. Regarding claims 66 and 69-72, the applicant request the supporting evident. In respond to the request, the examiner provides two references to support the well-known features as described above. The examiner reminds the applicant that Averbuch does implicitly disclose these limitations (see col. 2, lines 20-25 for retransmission of the lost packets and figure

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1 for standard mobile configuration. In this figure, the first node is node 103 and the second node is not shown but people of ordinary skill in the art will figure out that more than one BSC are included in the mobile system). Regarding claims 57-58, the applicant argued that *Yuen and Averbuch, individually or combined, fail to teach or suggest all the recitations of independent claim 49*. The examiner disagrees because Averbuch discloses all the limitations of claim 49 as described above. Regarding claim 62, the applicant argued that *Yuen and Corbett, individually or combined, fail to teach or suggest all the recitations of independent claim 49*. The examiner disagrees because Averbuch discloses all the limitations of claim 49 as described above.

Conclusion

12. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

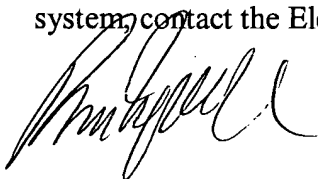
A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Brian D. Nguyen whose telephone number is (571) 272-3084. The examiner can normally be reached on 7:30-6:00 Monday-Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chau Nguyen can be reached on (571) 272-3126. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



5/10/05

BRIAN NGUYEN
PRIMARY EXAMINER